AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.   (Currently amended) A method for detecting a degree of pollution of an operational converter, <u>comprising the steps of:</u>

~~wherein~~ <u>determining</u> an operating state of ~~at least one of the converter's components which~~ <u>a converter component that is</u> exposed to the ambient air ~~of~~ <u>in</u> the converter;~~is determined, wherein~~

<u>determining</u> a corresponding operating state of ~~this~~ <u>the converter</u> component in ~~the~~ <u>an</u> unpolluted state; ~~is determined,~~ and

~~wherein~~ <u>determining a comparison value representing a comparison of the</u> ~~these~~ two operating states<u>, whereby the</u> ~~are compared with each other and a~~ comparison value thus determined ~~represents~~ <u>provides a</u> measure of the degree of pollution of the converter.

2.   (Currently amended) A method for detecting a degree of pollution of an operational converter, <u>comprising the steps of:</u>

~~wherein~~ <u>determining</u> a surface conductance of <u>a converter part that</u> ~~one of the converter's parts which~~ is exposed to ~~the~~ ambient air<u>;</u> ~~of the converter is determined~~ and

<u>determining a comparison value representing a comparison of the surface conductance</u> ~~compared~~ with a predetermined limit value <u>of the surface conductance, whereby</u> the comparison value thus determined ~~of which represents~~ <u>provides</u> a measure of the degree of pollution of the converter.

3.   (Currently amended) The method <u>of</u> ~~as claimed in~~ claim 1 ~~or 2, characterized in that~~ <u>further comprising the step of storing</u> the comparison <u>value</u> ~~values which are determined are stored~~.

4.   (Currently amended) The method of ~~as claimed in~~ claim ~~claims~~ 1 ~~to 3,~~ ~~characterized in that~~ further comprising the step of generating a warning signal ~~(S~~w~~) is generated~~ when a first predetermined comparison value ~~(T~~KKeG1~~)~~ is exceeded.

5.   (Currently amended) The method of claim 1 ~~as claimed in one of the~~ ~~preceding claims, characterized in that~~ further comprising the step of generating a warning message ~~is generated~~ when a second predetermined comparison value ~~(T~~KKeG2~~)~~ is exceeded, ~~which is~~ said second predetermined comparison value being greater than ~~the~~ said first predetermined comparison value ~~(T~~KKeG1~~), is exceeded~~.

6.   (Currently amended) The method ~~as claimed in~~ of claim 1, ~~characterized in~~ ~~that~~ wherein the operating state of the converter component is determined using a temperature of the converter component, said method further comprising the step of displaying the temperature of the ~~operating state of a~~ converter component ~~of the converter is displayed via its temperature (T~~KK~~)~~.

7.   (Currently amended) The method ~~as claimed in~~ of claim 1 ~~to 5, characterized~~ ~~in that~~ wherein the operating state of the converter component is determined using a resistance of the converter component, said method further comprising the step of displaying the resistance of the ~~operating state of a~~ converter component ~~of the converter is displayed through its resistance~~.

8.   (Currently amended) A device for detecting a degree of pollution of an operational converter, ~~having~~ said device comprising:

        a thermal model ~~(2)~~ for estimating a temperature ~~(T~~KK~~)~~ of a heat sink of the converter; ~~and having~~

        a temperature sensor ~~(4)~~ for determining ~~a~~ the temperature of the heat sink; ~~temperature (T~~KKmes~~) and having~~

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an evaluation circuit ~~(6), which is linked on the input side~~ connected to the thermal model ~~(2)~~ and to the temperature sensor ~~(4)~~ for comparing the estimated temperature and the determined temperature.

9. (Currently amended) A device for detecting a degree of pollution of an operational converter having a voltage supply, said device comprising: ~~having~~

an evaluation circuit; and

a resistor bridge circuit ~~(18) which is linked on the~~ having an input side connected to ~~a~~ the voltage supply of the converter, ~~and whose resistors (R₁, ..., R₄) are dimensioned so that~~ two resistors in said resistor bridge circuit that are diagonally opposite ~~resistors (R₂, R₃)~~ to each other being adapted to change their resistance by heating as a result of operation, ~~whereas~~ and the other two resistors in said resistor bridge circuit being adapted to maintain their resistance, ~~and the~~ said resistor bridge circuit having an output connected ~~of which is linked~~ to ~~an~~ said evaluation circuit.

10. (Currently amended) A device for detecting a degree of pollution of an operational converter having a voltage supply, said device comprising: ~~having~~

two conductor tracks ~~(28, 30)~~ extending close to each other, ~~wherein~~ one ~~is provided with~~ of said conductor tracks being connected to a discharge resistor ~~(24), wherein~~ the other conductor track ~~is linked~~ of said conductor tracks being connected to ~~a~~ the voltage supply of the converter,~~;~~ and ~~wherein~~

a voltage follower ~~(22) is electrically~~ connected in parallel with ~~the~~ said discharge resistor ~~(24)~~.

11. (Currently amended) The device ~~as claimed in~~ of claim 9, ~~characterized in that~~ wherein at least one resistor ~~(R₂, R₃)~~ of the two resistors ~~(R₂, R₃) which~~ that are adapted to change their resistance as a result of operation includes ~~consists of~~ a plurality of electrical resistors connected in series, said plurality

of resistors being ~~which are~~ arranged in a distributed manner in the converter.

12. (New) The method of claim 2, further comprising the step of storing the comparison value.

13. (New) The method of claim 2, further comprising the step of generating a warning signal when a first predetermined comparison value is exceeded.

14. (New) The method of claim 2, further comprising the step of generating a warning message when a second predetermined comparison value is exceeded, said second predetermined comparison value being greater than said first predetermined comparison value.

15. (New) The method of claim 2, wherein the operating state of the converter component is determined using a resistance of the converter component, said method further comprising the step of displaying the resistance of the converter component.